Sanofi	SAR103168
Mechanism of Action	Multi-kinase inhibitor
Overview	SAR103168 is a novel multi-targeted kinase inhibitor administered via intravenous infusion and active in various acute myeloid leukemia (AML) models including immature CD34+ AML cells expressing functional P-glycoprotein (P-gp). SAR103168 is highly active *in vitro* and *in vivo* human AML models as single agent. *In vitro,* SAR103168 has nanomolar potency, specifically against the proliferation of immature CD34+ AML leukemia cells expressing functional P-gp. Compared to cytarabine, dasatinib or tipifarnib, SAR103168 has a larger spectrum of activities on immature AML cells. *In vivo,* SAR103168 demonstrates very potent antitumor efficacy in several AML or CML models when assessed via multiple administration routes. It is also highly active in *in vivo* human AML models in combination with cytarabine and daunorubicin.
Safety/Tolerability	The phase 1 first in man (FIM) safety/tolerability data is still under evaluation and will be available following completion of the Clinical Study Report after 30 Jul 2012. Phase 1 clinical dose-escalation evaluation in patients with refractory/relapsed acute leukemias or high-risk myelodysplastic syndromes (NCT00981240) was terminated prior to MTD based on pharmacokinetic considerations.
Additional Information	None
Suitable for and Exclusions	Cardiovascular toxicity was monitored in the phase I FIM via hypertension, cardiac troponin, ECG, left ventricular ejection fraction (LVEF), tachycardia, etc. The potential impact of SAR103168 on QTc interval and PK parameters of midazolam in patients at the MTD were planned but not performed.
Clinical Trials	http://clinicaltrials.gov/ct2/results?term=SAR103168
Publications	None